

Can Expertise Modulate Representational Momentum?

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Abstract: Representational momentum (RM) refers to the tendency of observers to "remember" the stopping point of an event as being farther along in the direction of movement than it was in reality (Freyd & Finke, 1984). Our goal is to determine whether expertise modulates RM, and if so, whether this effect is transferred to domains other than the subject's domain of expertise. These studies point out some properties of representational momentum. It is generic in the sense that an anticipation bias is observed in all participants and in many varied situations. But RM is also dependent upon knowledge developed by observers in specific domains. Our study showed that expertise in automobile driving can modulate RM in road-scene perception: the cognitive characteristics of the observer can modulate the magnitude of the RM effect.